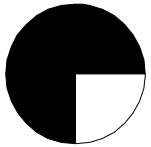
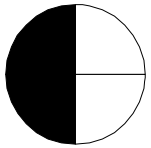
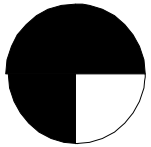
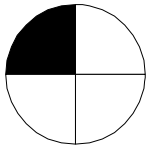
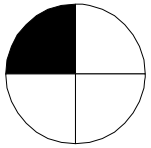
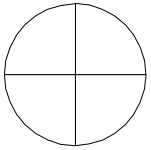
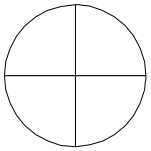
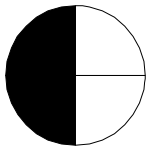
Opportunities & Needs from Regional Tensions

#1 Virtual Universal JIT Aircraft Factory -- highly integrated, many variations on basic design, easy changes, build as needed, open architecture, different sizes and capabilities, universal flying qualities

		Why This Score?	Rewrite for a Better Fit?
Pushing the Envelope		Universal not needed, extensive competition with easy entry, the cost penalty for the maximum flexibility is too high, but general approach is applicable	
Grounded		Pulling mfg. back to the US is desirable so is multi-location but universal is too expensive	
Trading Places		Similar requirements but global rather than US in scope; needs to be cost competitive; low military need	
Environmentally Challenged		Integrated model works but needs to be done cheaper; flexibility and JIT less important since long range demand planning exists and few types are needed	

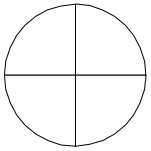
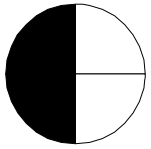
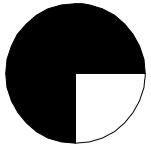
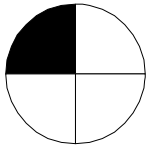
Opportunities & Needs from Regional Tensions

#2 Skill-Targeted Education System – core education, followed by targeted training, industry is campus for targeted education, Defense Education Act of 2020

		Why This Score?	Rewrite for a Better Fit?
Pushing the Envelope		No government intervention,; voluntary program is need driven and focus is global not US only.	
Grounded		World has an excess number of skilled engineers and workers plus low government involvement	
Trading Places		Little support from government and skills are easily purchased abroad	
Environmentally Challenged		This would help some and might meet some needs and there might be government support but it is an anti-technology world	

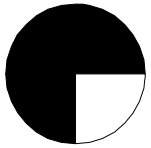
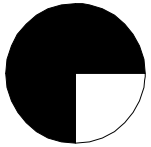
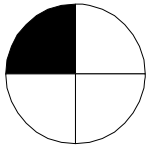
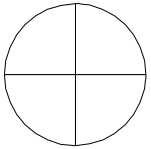
Opportunities & Needs from Regional Tensions

#3 **Short-to-Medium Haul, Infrastructure-Independent Stealthy Transport Aircraft** – for military it is special forces & multi-role, For civil transport in South American, short haul dense markets, and support for dispersed manufacturing locations

		Why This Score?	Rewrite for a Better Fit?
Pushing the Envelope		Too expensive for world; infrastructure is being built in China and SA; needs to be made cheaper	
Grounded		This works great with the military [4] but not at all with the civil market [0] though there is a need for heavy payloads	
Trading Places		Basic overlap on civilian side; no roads in China, no stealth nor military need, but reduction of observables is good	
Environmentally Challenged		Infrastructure is not a problem but the stealthy aspects are attractive	

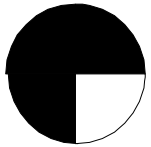
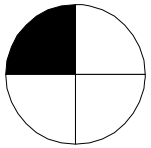
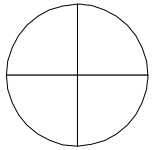
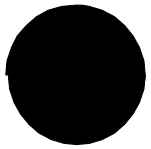
Opportunities & Needs from Regional Tensions

#4 Extremely Long Range, Large, High Speed Transport Aircraft – for military in force projection and precision air drop, for civilian for high value industrial product distribution and passenger transport to make better use of scarce transport infrastructure

		Why This Score?	Rewrite for a Better Fit?
Pushing the Envelope		In this world Civil has the lead and military takes rather than other way around	
Grounded		A small SST is attractive and similar technology is needed but scaled down, but LARGE is bad	
Trading Places		Large transport is needed but sub sonic the world does not have the infrastructure constraints	
Environmentally Challenged		Energy and emissions make this prohibitive	

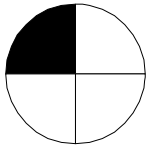
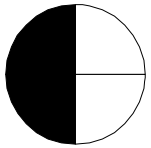
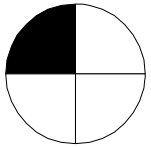
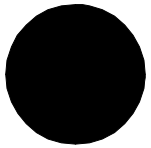
Opportunities & Needs from Regional Tensions

#5 **UAVs for Surveillance, Cargo, Combat, and Communications**

		Why This Score?	Rewrite for a Better Fit?
Pushing the Envelope		Combat is not important but civil to military flexibility makes the UAV attractive	
Grounded		Little application in this world	
Trading Places		No military missions ad most of other missions are done from space.	
Environmentally Challenged		Low weight, low cost, low energy observation make this a hit	

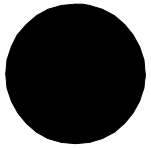
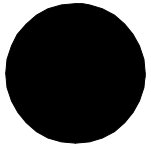
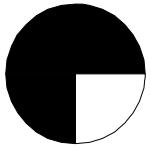
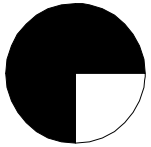
Opportunities & Needs from Regional Tensions

#6 Stealth and Quite – in military for anti-stealth, in civil for commercial stealth for defense of civil aircraft & reduced observability near airports

		Why This Score?	Rewrite for a Better Fit?
Pushing the Envelope		The "quiet" and "low pollution" attributes are attractive	
Grounded		Observables such as noise reduction are good and other features compatible with need for a survival aircraft	
Trading Places		No military need but environmental elements are needed	
Environmentally Challenged		Defense against terrorists and environmental benefits work very well	

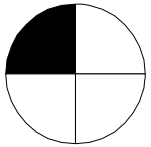
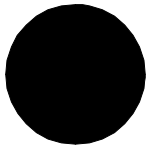
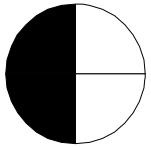
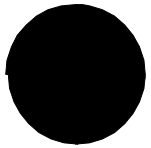
Opportunities & Needs from Regional Tensions

#7 Quick, Cheap, Non-Human Access to Space – for military to place assets in space faster than enemy can destroy (surveillance, missile defense, communications, navigation, weather), for civil for communications, navigation, surveillance, weather, mercenary use. In aero ops for air breathing first stage, aircraft like operations

		Why This Score?	Rewrite for a Better Fit?
Pushing the Envelope		Low cost "on demand" is perfect military pay or civilian pay load makes no difference	Change language to "on demand"
Grounded		Quick response rapid launch of small satellites is ideal	
Trading Places		Access is important but no military need and on demand is not important communications needs reliability	
Environmentally Challenged		No real need for air breathing access but if competitive it is OK	

Opportunities & Needs from Regional Tensions

#8 Unstaffed or Autonomous ATC – system self-contained in aircraft

		Why This Score?	Rewrite for a Better Fit?
Pushing the Envelope		Massive air traffic demand , have infrastructure no need for autonomous	
Grounded		Need very similar technology	
Trading Places		Serving airports with limited support; a more integrated world	
Environmentally Challenged		Interest in low energy cost aspects	